

CAS ONLINE PRINTOUT

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(FILE 'HOME' ENTERED AT 08:50:28 ON 11 MAY 2006)

FILE 'CASREACT' ENTERED AT 08:50:34 ON 11 MAY 2006

L1 STRUCTURE UPLOADED

L2 1 S L1 FUL

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L2 ANSWER 1 OF 1 CASREACT COPYRIGHT 2006 ACS on STN

AN 141:37649 CASREACT

TI Enzymatic production of (meth)acrylic esters that contain urethane groups

IN Dietsche, Frank; Haering, Dietmar; Wagner, Eva; Schwalm, Reinhold; Rink, Heinz-Peter; Beck, Erich

PA BASF Aktiengesellschaft, Germany

SO PCT Int. Appl., 42 pp.

CODEN: PIXXD2

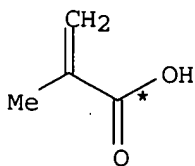
DT Patent

LA German

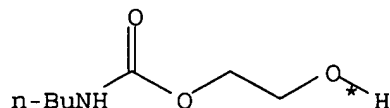
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004050888	A1	20040617	WO 2003-EP13689	20031204
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
	RW:	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	DE 10257094	A1	20040624	DE 2002-10257094	20021205
	AU 2003288227	A1	20040623	AU 2003-288227	20031204
	EP 1570065	A1	20050907	EP 2003-780119	20031204
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			
	BR 2003016803	A	20051018	BR 2003-16803	20031204
	JP 2006508657	T2	20060316	JP 2004-556289	20031204
	US 2006084779	A1	20060420	US 2005-536968	20050531
PRAI	DE 2002-10257094		20021205		
	WO 2003-EP13689		20031204		
OS	MARPAT 141:37649				
RE.CNT	11	THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD			
		ALL CITATIONS AVAILABLE IN THE RE FORMAT			

RX(3) OF 6 ...F + C ==> G



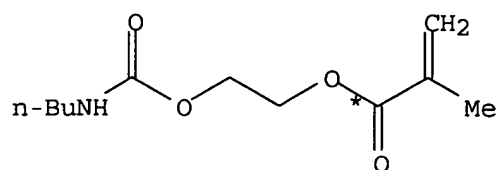
F



C

(3) →

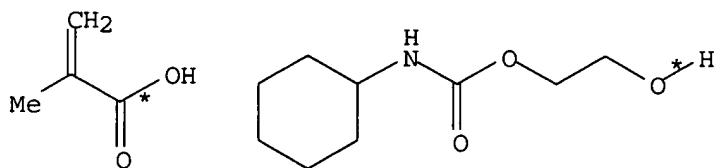
CAS ONLINE PRINTOUT



G
YIELD 97%

RX(3) RCT F 79-41-4, C 13105-54-9
PRO G 51293-89-1
CAT 9001-62-1 Lipase
CON 24 hours, 60 deg C
NTE Novozyme 435 used as catalyst

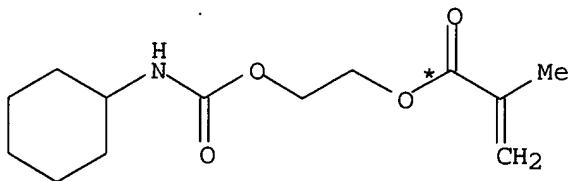
RX(4) OF 6 ...F + E ==> I



F

E

(4) \longrightarrow

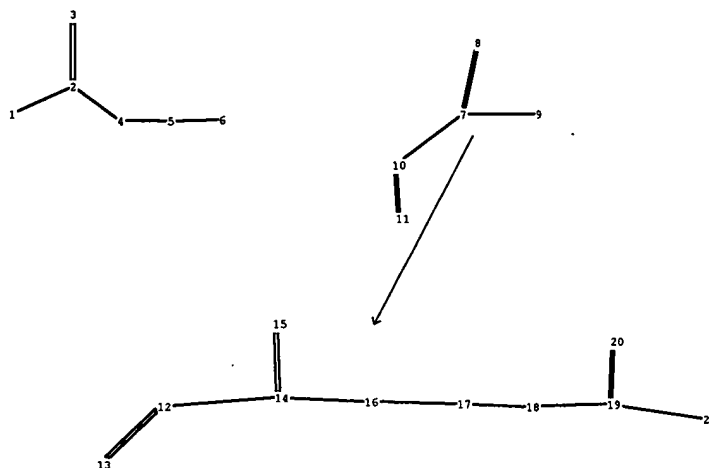
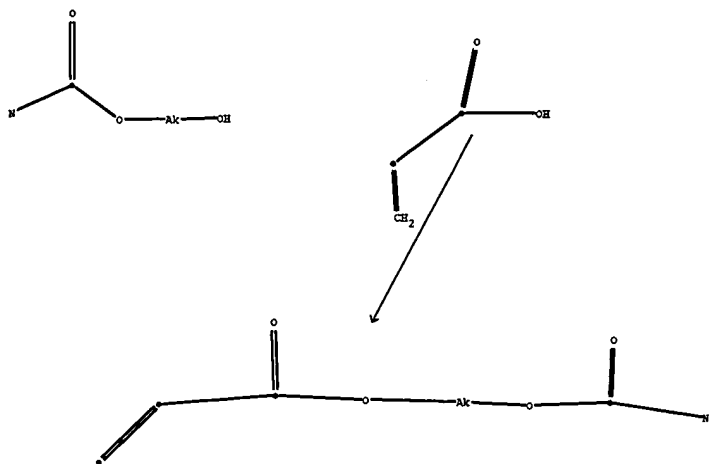


I
YIELD 95%

RX(4) RCT F 79-41-4, E 13027-13-9
PRO I 94201-45-3
CAT 9001-62-1 Lipase
CON 24 hours, 60 deg C
NTE Novozyme 435 used as catalyst

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L1



chain nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21

chain bonds :

1-2 2-3 2-4 4-5 5-6 7-8 7-9 7-10 10-11 12-13 12-14 14-15 14-16
16-17 17-18 18-19 19-20 19-21

exact/norm bonds :

1-2 2-3 2-4 4-5 5-6 14-15 14-16 16-17 17-18 18-19 19-20 19-21

exact bonds :

7-10 10-11 12-13 12-14

normalized bonds :

7-8 7-9

Match level :

1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS

9:CLASS 10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS

16:CLASS 17:CLASS 18:CLASS 19:CLASS 20:CLASS 21:CLASS

fragments assigned product role:

containing 12

fragments assigned reactant/reagent role:

containing 1

containing 7